

APPENDIX II-A

SUBSTANCES USED IN THE ICE TEST METHOD REANALYSIS

[This Page Intentionally Left Blank]

Substances Used in the ICE Test Method Reanalysis

Substance	CASRN ¹	Concentration Tested	Chemical Class	Product Class	pH	Form Tested	Water Solubility ²	In Vitro Classification (GHS) ^{3,4}	In Vivo Classification (GHS) ⁵	Category 1 Subclass ⁶	In Vitro Classification (EPA) ^{6,7}	In Vivo Classification (EPA) ⁷	In Vitro Classification (EU) ^{8,9}	In Vivo Classification (EU) ⁹	Reference
Acetone	67-64-1	100%	Ketone	Solvent; Antiseptic; Chemical intermediate; Raw material		liquid	S	2A	2A		II	II	R36	R36	Balls et al. (1995)
Ammonium nitrate	6484-52-2	100%	Inorganic salt, Onium compound	Fertilizer; Chemical intermediate; Industrial explosive		solid	S	2B	2B		III	III	NI	R36	Balls et al. (1995)
L-Aspartic acid	70-47-3	100%	Amino acid	Organic intermediate; Fungicides; Germicides		solid	S	2A	SCNM ¹⁰		II	SCNM	R36	SCNM	Balls et al. (1995)
Benzalkonium chloride (1%)	8001-54-5	1%	Onium compound	Surfactant (cationic); Bactericide; Fungicide; Preservative		liquid	S	2A	1	1	II	1	R36	R41	Balls et al. (1995)
Benzalkonium chloride (10%)	8001-54-5	10%	Onium compound	Surfactant (cationic); Bactericide; Fungicide; Preservative	3.10	liquid	S	1	1	4	I	I	R41	R41	Balls et al. (1995)
Benzalkonium chloride (5%)	8001-54-5	5%	Onium compound	Surfactant (cationic); Bactericide; Fungicide; Preservative	3.23	liquid	S	1	1	2	I	I	R41	R41	Balls et al. (1995)
n-Butyl acetate	123-86-4	100%	Ester	Solvent; Synthetic flavor ingredient		liquid	I*	2A	NI		II	III	R36	NI	Balls et al. (1995)
Gammabutyrolactone	96-48-0	100%	Heterocyclic, Lactone	Synthetic intermediate; Solvent		liquid	S	2A	2A		II	II	R36	R36	Balls et al. (1995)
Captan 90 concentrate	133-06-2	100%	Imide, Organic sulfur compound	Pesticide	7.95	solid	S	2B	1	4	III	I	NI	R41	Balls et al. (1995)
4-Carboxybenzaldehyde	619-66-9	100%	Carboxylic acid, Aldehyde	Manufacturing impurity (polyester); Developer intermediate		solid	I*	NI	2A		IV	II	NI	R36	Balls et al. (1995)
Cetylpyridinium bromide (0.1%)	140-72-7	0.1%	Heterocyclic, Onium compound	Surfactant (cationic); Germicide; Laboratory reagent		liquid	Sf	2B	NI		III	III	NI	NI	Balls et al. (1995)
Cetylpyridinium bromide (10%)	140-72-7	10%	Heterocyclic, Onium compound	Surfactant (cationic); Germicide; Laboratory reagent	4.81	liquid	Sf	2A	1	4	II	I	R36	R41	Balls et al. (1995)
Chlorhexidine	55-56-1	100%	Amine/Amidine	Disinfectant; Mouthwash; Anti-infective agent	10.12	solid	I*	1	1	4	I	SCNM	R41	SCNM	Balls et al. (1995)
Cyclohexanol	108-93-0	100%	Alcohol	Solvent; Chemical intermediate	4.54	liquid	S	1	1	2	I	I	R41	R41	Balls et al. (1995)
Dibenzoyl-L-tartaric acid	2743-38-6	100%	Carboxylic acid, Ester	Optical resolution agent	2.39	solid	I	1	1	2	I	SCNM	R41	R41	Balls et al. (1995)
Dibenzyl phosphate	1623-08-1	100%	Ester, Organophosphorus compound	Not classified		solid	I*	2A/2B	2A		II/III	II	R36	R36	Balls et al. (1995)
2,6-Dichlorobenzoyl chloride	4659-45-4	100%	Acyl halide	Anti-infective; Anti-fungal; Preservative		liquid	I*	2A	2A		II	II	R36	SCNM	Balls et al. (1995)
2,2-Dimethylbutanoic acid	595-37-9	100%	Carboxylic acid	Pharmaceutical metabolite		liquid	I	1	SCNM		I	I	R41	SCNM	Balls et al. (1995)
2,5-Dimethylhexanediol	110-03-2	100%	Alcohol	Intermediate for pharmaceuticals, pesticides, perfumes	5.72	solid	I	2B	1	1	III	I	R36	R41	Balls et al. (1995)
Ethanol	64-17-5	100%	Alcohol	Solvent; Beverages; Antifreeze agent		liquid	S	1	2A		I	III	R41	NI	Balls et al. (1995)
Ethyl acetate	141-78-6	100%	Ester	Solvent; Synthetic flavoring		liquid	S	2A	NI		II	III	R36	NI	Balls et al. (1995)
2-Ethyl-1-hexanol	104-76-7	100%	Alcohol	Solvent; Plasticizer		liquid	S	2A	2A		II	II	R36	R36	Balls et al. (1995)
Ethyl-2-methylacetacetate	609-14-3	100%	Ketone, Ester	Not classified		liquid	S*	2B	2B		III	III	NI	NI	Balls et al. (1995)
Ethyl trimethyl acetate	3938-95-2	100%	Ester	Solvent		liquid	I*	2B	NI		III	III	NI	NI	Balls et al. (1995)
Fomesafen	72128-02-0	100%	Imide, Ether, Nitro compound	Pesticide		solid	S	2B	NI		III	III	NI	NI	Balls et al. (1995)
Glycerol	56-81-5	100%	Alcohol	Solvent; Plasticizer; Lubricant; Emollient; Drug vehicle		liquid	S	2B	NI		III	IV	NI	NI	Balls et al. (1995)
n-Hexanol	111-27-3	100%	Alcohol	Solvent; Chemical intermediate; Synthetic flavor ingredient		liquid	I*	1	2A		I	II	R41	R36	Balls et al. (1995)
Imidazole	288-32-4	100%	Heterocyclic	Anti-fungal; Enzyme inhibitor	10.32	solid	S	1	1	4	I	I	R41	R41	Balls et al. (1995)
Isobutanol	78-83-1	100%	Alcohol	Solvent; Chemical intermediate; Flavor ingredient		liquid	I*	1	2A		I	II	R41	R36	Balls et al. (1995)
Isopropanol	67-63-0	100%	Alcohol	Solvent; Aerosol formulations (ingredient)		liquid	S	1	2A		I	III	R41	SCNM	Balls et al. (1995)
Maneb	12427-38-2	100%	Amine/Amidine, Organic salt, Urea compound	Pesticide		solid	S	NI	SCNM		IV	III	NI	SCNM	Balls et al. (1995)
Methyl acetate	79-20-9	100%	Ester	Solvent; Chemical intermediate; Synthetic flavor ingredient		liquid	S	1	2A		I	II	R41	R36	Balls et al. (1995)

Substance	CASRN ¹	Concentration Tested	Chemical Class	Product Class	pH	Form Tested	Water Solubility ²	In Vitro Classification (GHS) ^{3,4}	In Vivo Classification (GHS) ⁴	Category I Subclass ⁵	In Vitro Classification (EPA) ^{6,7}	In Vivo Classification (EPA) ⁷	In Vitro Classification (EU) ^{8,9}	In Vivo Classification (EU) ⁹	Reference
Methyl cyanoacetate	105-34-0	100%	Ester, Nitrile compound	Adhesive; Pharmaceutical intermediate		liquid	S*	NI	2A		IV	II	NI	R36	Balls et al. (1995)
Methylcyclopentane	96-37-7	100%	Hydrocarbon (cyclic)	Solvent		liquid	I*	NI	NI		IV	III	NI	NI	Balls et al. (1995)
Methyl ethyl ketone	78-93-3	100%	Ketone	Solvent; Manufacture of lacquers, varnishes, cosmetics, pharmaceuticals		liquid	S	1	2A		I	III	R41	R36	Balls et al. (1995)
Methyl isobutyl ketone	108-10-1	100%	Ketone	Solvent; Synthetic flavor; Drycleaning		liquid	I*	2A	NI		II	III	R36	NI	Balls et al. (1995)
1-Naphthaleneacetic acid	86-87-3	100%	Carboxylic acid, Polycyclic compound	Pesticide	3.34	solid	I*	2B	1	NC	III	1	R36	SCNM	Balls et al. (1995)
1-Naphthaleneacetic acid, sodium salt	61-31-4	100%	Carboxylic acid (salt), Polycyclic compound	Pesticide		solid	S*	1	1	I	I	R41	R41	Balls et al. (1995)	
n-Octanol	111-87-5	100%	Alcohol	Solvent; Fragrance		liquid	I*	2A	2B		II	II	R36	R36	Balls et al. (1995)
Parafluorooaniline	371-40-4	100%	Amine/Amidine	Intermediate for herbicides; Dyes		liquid	I	1	SCNM		I	SCNM	R41	SCNM	Balls et al. (1995)
Polyethylene glycol 400	25322-68-3	100%	Alcohol, Polyether	Surfactant (nonionic); Lubricant, Plasticizer, Solvent		liquid	S	2B	NI		III	IV	R36	NI	Balls et al. (1995)
Potassium cyanate	590-28-3	100%	Inorganic salt	Herbicide; Pharmaceutical intermediate		solid	S	2B	SCNM		III	SCNM	R36	SCNM	Balls et al. (1995)
Promethazine HCl	58-33-3	100%	Amine/Amidine, Heterocyclic, Organic sulfur compound	Antihistamine; Anti-nausea drug	4.50	solid	S*	1	1	3	I	I	R41	R41	Balls et al. (1995)
Pyridine	110-86-1	100%	Heterocyclic	Solvent; Intermediate for pharmaceuticals, dyes, pesticides	9.85	liquid	S	1	1	4	I	I	R41	R41	Balls et al. (1995)
Quinacrine	69-05-6	100%	Amine/Amidine, Heterocyclic, Polycyclic compound	Anti-infective (anti-helmintic)	3.77	solid	S*	2B	1	3	III	I	NI	R41	Balls et al. (1995)
Sodium hydroxide (1%)	1310-73-2	1%	Alkali	Caustic agent		liquid	S	2A	2B		II	III	R36	R36	Balls et al. (1995)
Sodium hydroxide (10%)	1310-73-2	10%	Alkali	Caustic agent	12.66	liquid	S	1	1	4	I	I	R41	R41	Balls et al. (1995)
Sodium lauryl sulfate (15%)	151-21-3	15%	Carboxylic acid (salt)	Surfactant (anionic), Detergent		liquid	SF	2B	1	NC	III	1	R36	R36	Balls et al. (1995)
Sodium lauryl sulfate (3%)	151-21-3	3%	Carboxylic acid (salt)	Surfactant (anionic), Detergent	6.57	liquid	SF	2B	NI		III	III	NI	NI	Balls et al. (1995)
Sodium oxalate	62-76-0	100%	Carboxylic acid (salt)	Textile finishing; Pyrotechnic, Industrial byproduct	9.40	solid	S	2B	1	4	III	I	NI	R41	Balls et al. (1995)
Sodium perborate, 4H ₂ O	10486-00-7	100%	Inorganic salt, Boron compound	Household cleaner; Detergent	9.98	solid	S	2B	1	4	III	I	NI	R41	Balls et al. (1995)
Tetraaminopyrimidine sulfate	5392-28-9	100%	Amine/Amidine, Heterocyclic	Developer		solid	I*	2B	NI		III	III	NI	NI	Balls et al. (1995)
Toluene	108-88-3	100%	Hydrocarbon (cyclic)	Solvent; Gasoline additive; Manufacture of benzene derivatives, medicines, dyes, perfumes		liquid	I *	2A	NI		II	III	R36	NI	Balls et al. (1995)
Trichloroacetic acid (3%)	76-03-9	3%	Carboxylic acid	Caustic agent; Fixative; Herbicide		liquid	S	2A	NI		II	III	R36	NI	Balls et al. (1995)
Trichloroacetic acid (30%)	76-03-9	30%	Carboxylic acid	Caustic agent; Fixative; Herbicide	0.69	liquid	S	1	1	4	I	I	R41	R41	Balls et al. (1995)
Triton X-100 (10%)	9002-93-1	10%	Polyether	Surfactant (nonionic), Detergent, Emulsifier	7.18	liquid	SF	2A/2B	1	NC	II/III	II	R36	R41	Balls et al. (1995)
Triton X-100 (5%)	9002-93-1	5%	Polyether	Surfactant (nonionic), Detergent, Emulsifier		liquid	SF	2A	2A		II	III	R36	NI	Balls et al. (1995)
Tween 20	9005-64-5	100%	Ester, Polyether	Surfactant (nonionic), Detergent	3.84	liquid	SF	2B	NI		III	III	NI	NI	Balls et al. (1995)
TNO-41 (Amidosulfonic acid)	5329-14-6	100%	Acid	Herbicide; Flame retardant; Metal cleaning; Acid dye		solid	n.p. ¹¹	1	-		I	-	R41	R41 (SC)	Prinsen (1996)
TNO-04 (Detergent-1 ¹²)	n.p.	undiluted	Not classified	Soaps, Surfactants		liquid	n.p.	2B	2A		III	III	NI	NI	Prinsen (1996)
TNO-34 (Detergent-2)	n.p.	undiluted	Not classified	Soaps, Surfactants		liquid	n.p.	1	SCNM	I	SCNM	R41	SCNM	Prinsen (1996)	
TNO-39 (Detergent-3)	n.p.	undiluted	Not classified	Soaps, Surfactants		liquid	n.p.	NI	NI		IV	IV	NI	NI	Prinsen (1996)
TNO-44 (Didecyltrimethylammoniumchloride [23% in propyl glycol])	71173-51-5	23%	Not classified	Household cleaner (disinfectant)		liquid	n.p.	1	-		I	-	R41	R41 (SC)	Prinsen (1996)
TNO-36 (Ethylhexyl lactate)	6283-86-9	undiluted	Acid, Ester	Solvent, Wetting agent		liquid	n.p.	2A	SCNM		II	II	R36	SCNM	Prinsen (1996)
TNO-01 (Formulation-1)	n.p.	undiluted	Not classified	Not classified		liquid	n.p.	NI	NI		IV	IV	NI	NI	Prinsen (1996)
TNO-02 (Formulation-2)	n.p.	undiluted	Not classified	Not classified		liquid	n.p.	2A	2A		II	II	R36	R36	Prinsen (1996)
TNO-12 (Formulation-3)	n.p.	undiluted	Not classified	Not classified		paste	n.p.	2A	NI		II	SCNM	R36	R36	Prinsen (1996)
TNO-42 (Glyceobromoacetate)	3785-34-0	85%	Acetate	Not classified		liquid	n.p.	1	-		I	-	R41	R41 (SC)	Prinsen (1996)
TNO-40 (Glyceobromoacetate form.)	n.p.	undiluted	Not classified	Not classified		liquid	n.p.	1	-		I	-	R41	R41 (SC)	Prinsen (1996)
TNO-07 (Ink-1)	n.p.	undiluted	Not classified	Dyes		liquid	n.p.	NI	NI		IV	IV	NI	NI	Prinsen (1996)
TNO-08 (Ink-2)	n.p.	undiluted	Not classified	Dyes		liquid	n.p.	NI	NI		IV	IV	NI	NI	Prinsen (1996)
TNO-26 (Ink-3)	n.p.	undiluted	Not classified	Dyes		liquid	n.p.	NI	NI		IV	IV	NI	NI	Prinsen (1996)
TNO-32 (Ink-4)	n.p.	undiluted	Not classified	Dyes		liquid	n.p.	2B	NI		III	IV	NI	NI	Prinsen (1996)
TNO-16 (Liquid nylon product)	n.p.	undiluted	Not classified	Industrial formulation		liquid	n.p.	NI	NI		IV	IV	NI	NI	Prinsen (1996)

Substance	CASRN ¹	Concentration Tested	Chemical Class	Product Class	pH	Form Tested	Water Solubility ²	In Vitro Classification (GHS) ^{3,4}	In Vivo Classification (GHS) ⁴	Category I Subclass ⁵	In Vitro Classification (EPA) ^{6,7}	In Vivo Classification (EPA) ⁷	In Vitro Classification (EU) ^{8,9}	In Vivo Classification (EU) ⁹	Reference
TNO-06 (Lubricant)	n.p.	undiluted	Not classified	Not classified	gel	n.p.	NI	NI	-	IV	IV	NI	NI	NI	Prinsen (1996)
TNO-43 (Monobromooacetic acid)	79-08-3	undiluted	Acid	Chlorination byproduct	solid	S	1	-	-	I	-	R41	R41 (SC)	Prinsen (1996)	
TNO-09 (Paint)	n.p.	undiluted	Not classified	Paint	liquid	n.p.	NI	NI	-	IV	II	NI	NI	NI	Prinsen (1996)
TNO-03 (Pesticide-1)	n.p.	undiluted	Not classified	Pesticide	liquid	n.p.	NI	NI	-	IV	III	NI	NI	NI	Prinsen (1996)
TNO-13 (Pesticide-2)	n.p.	undiluted	Not classified	Pesticide	solid	n.p.	NI	NI	-	IV	IV	NI	NI	NI	Prinsen (1996)
TNO-30 (Pesticide-3)	n.p.	undiluted	Not classified	Pesticide	solid	n.p.	2B	NI	-	III	IV	NI	NI	NI	Prinsen (1996)
TNO-37 (Pesticide-4)	n.p.	undiluted	Not classified	Pesticide	solid	n.p.	2B	2B	-	III	III	NI	NI	NI	Prinsen (1996)
TNO-14 (Polydisaccharide)	n.p.	14.5%	Carbohydrate	Not classified	liquid	n.p.	NI	NI	-	IV	IV	NI	NI	NI	Prinsen (1996)
TNO-15 (Polydisaccharide)	n.p.	50%	Carbohydrate	Not classified	liquid	n.p.	NI	NI	-	IV	IV	NI	NI	NI	Prinsen (1996)
TNO-35 (Proanyl-lactate)	616-09-1	undiluted	Acid	Food additive; Solvent	liquid	S	1	1	1	I	I	R41	R41	Prinsen (1996)	
TNO-05 (Silicone powder-1)	n.p.	undiluted	Not classified	Not classified	solid	I	NI	NI	-	IV	IV	NI	NI	NI	Prinsen (1996)
TNO-10 (Silicone powder-2)	n.p.	undiluted	Not classified	Not classified	solid	I	NI	NI	-	IV	IV	NI	NI	NI	Prinsen (1996)
TNO-11 (Sodium p-styrene sulfonate)	2695-37-6	undiluted	Hydrocarbon; Acid	Industrial chemical	solid	n.p.	2A	SCNM	-	II	SCNM	R36	SCNM	Prinsen (1996)	
TNO-17 (Solvent-1)	n.p.	undiluted	Not classified	Solvent	liquid	n.p.	NI	NI	-	IV	IV	NI	NI	NI	Prinsen (1996)
TNO-38 (Solvent-10)	n.p.	undiluted	Not classified	Solvent	liquid	n.p.	NI	NI	-	IV	IV	NI	NI	NI	Prinsen (1996)
TNO-18 (Solvent-2)	n.p.	undiluted	Not classified	Solvent	liquid	n.p.	NI	NI	-	IV	IV	NI	NI	NI	Prinsen (1996)
TNO-19 (Solvent-3)	n.p.	undiluted	Not classified	Solvent	liquid	n.p.	NI	NI	-	IV	IV	NI	NI	NI	Prinsen (1996)
TNO-20 (Solvent-4)	n.p.	undiluted	Not classified	Solvent	liquid	n.p.	NI	NI	-	IV	IV	NI	NI	NI	Prinsen (1996)
TNO-21 (Solvent-5)	n.p.	undiluted	Not classified	Solvent	liquid	n.p.	NI	NI	-	IV	IV	NI	NI	NI	Prinsen (1996)
TNO-22 (Solvent-6)	n.p.	undiluted	Not classified	Solvent	liquid	n.p.	NI	NI	-	IV	IV	NI	NI	NI	Prinsen (1996)
TNO-23 (Solvent-7)	n.p.	undiluted	Not classified	Solvent	liquid	n.p.	NI	NI	-	IV	IV	NI	NI	NI	Prinsen (1996)
TNO-24 (Solvent-8)	n.p.	undiluted	Not classified	Solvent	liquid	n.p.	NI	NI	-	IV	IV	NI	NI	NI	Prinsen (1996)
TNO-25 (Solvent-9)	n.p.	undiluted	Not classified	Solvent	liquid	n.p.	NI	NI	-	IV	IV	NI	NI	NI	Prinsen (1996)
TNO-31 (Sulfur)	7704-34-9	undiluted	Inorganic chemical	Industrial chemical	solid	I	NI	NI	-	IV	III	NI	NI	NI	Prinsen (1996)
TNO-27 (Thermal paper coating-1)	n.p.	undiluted	Not classified	Industrial chemical	liquid	n.p.	2B	2B	-	III	III	NI	NI	NI	Prinsen (1996)
TNO-33 (Thermal paper coating-2)	n.p.	undiluted	Not classified	Industrial chemical	liquid	n.p.	2B	NI	-	III	IV	NI	NI	NI	Prinsen (1996)
TNO-28 (Toilet cleaner-1)	n.p.	undiluted	Not classified	Household cleaner	liquid	n.p.	2B	1	NC	III	I	NI	R41	Prinsen (1996)	
TNO-29 (Toilet cleaner-2)	n.p.	undiluted	Not classified	Household cleaner	liquid	n.p.	2B	2A	-	III	III	NI	NI	R36	Prinsen (1996)
Cetylpyridinium bromide (6%)	140-72-7	6%	Heterocyclic, Onium compound	Surfactant (cationic); Germicide, Laboratory reagent	6.37	liquid	n.p.	1	1	2	I	SCNM	R41	R41	Prinsen (2000)
cyclohexylamino-functional PMS			Organosilicon compound			liquid	n.p.	2A	-	-	II	-	R36	R36	Prinsen (2000)
decamethylcyclopentasiloxane			Organosilicon compound			liquid	n.p.	NI	-	-	NI	-	NI	NI	Prinsen (2000)
Triton X-500 (5%)			Polyether	Surfactant (nonionic); Detergent, Emulsifier		liquid	n.p.	2B	-	-	III	-	NI	R36	Prinsen (2000)
TNO-45 (Aqueous framing solution)	n.p.	undiluted	Not classified	Not classified	liquid	n.p.	NI	NI	-	NI	IV	NI	NI	NI	Prinsen (2005)
TNO-46 (Raw material powder)	n.p.	undiluted	Not classified	Raw material	solid	n.p.	NI	NI	-	IV	NI	NI	NI	NI	Prinsen (2005)
TNO-47 (Ferro powder)	n.p.	undiluted	Not classified	Not classified	solid	n.p.	NI	NI	-	NI	IV	NI	NI	NI	Prinsen (2005)
TNO-48 (Corrosion inhibitor liquid)	n.p.	undiluted	Not classified	Not classified	liquid	n.p.	2A	-	-	II	-	R36	R41 (SC)	Prinsen (2005)	
TNO-49 (Wood impregnator liquid)	n.p.	undiluted	Not classified	Not classified	liquid	n.p.	1	-	-	I	-	R41	R41 (SC)	Prinsen (2005)	
TNO-50 (Sodium hypochlorite-containing formulation)	n.p.	undiluted	Not classified	Disinfectant		n.p.	1	-	-	I	-	R41	R41 (SC)	Prinsen (2005)	
TNO-51 (Disinfectant)	n.p.	undiluted	Not classified	Disinfectant		n.p.	n.p.	1	-	I	-	R41	R41 (SC)	Prinsen (2005)	
TNO-52 (Pesticide liquid)	n.p.	undiluted	Not classified	Pesticide	liquid	n.p.	2B	2A	-	III	III	NI	R36	Prinsen (2005)	
TNO-53 (Ink formulation)	n.p.	undiluted	Not classified	Dyes	liquid	n.p.	NI	NI	-	IV	NI	NI	NI	Prinsen (2005)	
TNO-54 (Raw material powder)	n.p.	undiluted	Not classified	Raw material	solid	n.p.	2B	2B	-	III	III	NI	NI	Prinsen (2005)	
TNO-55 (Elastomer liquid)	n.p.	undiluted	Not classified	Elastomer	liquid	n.p.	2B	2A	-	III	III	R36	R36	Prinsen (2005)	
TNO-56 (Elastomer liquid)	n.p.	undiluted	Not classified	Elastomer	liquid	n.p.	2B	2B	-	III	III	R36	NI	Prinsen (2005)	
TNO-57 (Epoxy resin liquid)	n.p.	undiluted	Not classified	Resin	liquid	n.p.	2B	NI	-	III	IV	NI	NI	Prinsen (2005)	
TNO-58 (Styrene resin powder)	n.p.	undiluted	Not classified	Resin	solid	n.p.	NI	NI	-	NI	IV	NI	NI	Prinsen (2005)	
TNO-59 (Ferro powder)	n.p.	undiluted	Not classified	Not classified	solid	n.p.	NI	NI	-	NI	IV	NI	NI	Prinsen (2005)	
TNO-60 (Fungicide; paint)	n.p.	undiluted	Not classified	Paint	liquid	n.p.	NI	NI	-	NI	IV	NI	NI	Prinsen (2005)	
TNO-61 (Silver thiosulfate liquid)	n.p.	undiluted	Not classified	Not classified	liquid	n.p.	NI	NI	-	NI	IV	NI	NI	Prinsen (2005)	
TNO-62 (Lactate liquid)	n.p.	undiluted	Not classified	Not classified	liquid	n.p.	2B	NI	-	III	III	R36	NI	Prinsen (2005)	
TNO-63 (Copolymer powder)	n.p.	undiluted	Not classified	Copolymer	solid	n.p.	NI	NI	-	IV	III	NI	NI	Prinsen (2005)	
TNO-64 (Fluoroallyl acrylate copolymer)	n.p.	undiluted	Not classified	Copolymer	emulsion	n.p.	2B	NI	-	III	IV	NI	NI	Prinsen (2005)	
TNO-65 (Fluoroallyl acrylate copolymer)	n.p.	undiluted	Not classified	Copolymer	emulsion	n.p.	NI	NI	-	NI	IV	NI	NI	Prinsen (2005)	
TNO-66 (Raw material powder)	n.p.	undiluted	Not classified	Raw material	solid	n.p.	NI	NI	-	NI	IV	NI	NI	Prinsen (2005)	
TNO-67 (Ink formulation)	n.p.	undiluted	Not classified	Dyes	liquid	n.p.	2B	NI	-	III	IV	NI	NI	Prinsen (2005)	
TNO-68 (Cleaning product)	n.p.	undiluted	Not classified	Cleaner	liquid	n.p.	2A	2A	-	II	II	R36	R36	Prinsen (2005)	
TNO-69 (Cleaning product)	n.p.	2%	Not classified	Not classified	liquid	n.p.	NI	NI	-	NI	IV	NI	NI	Prinsen (2005)	
TNO-70 (Fluoroallyl acrylate copolymer)	n.p.	undiluted	Not classified	Copolymer	emulsion	n.p.	2A	2A	-	II	III	R36	R36	Prinsen (2005)	
TNO-71 (Fluoroallyl acrylate copolymer)	n.p.	undiluted	Not classified	Copolymer	emulsion	n.p.	2B	NI	-	III	IV	NI	NI	Prinsen (2005)	
TNO-72 (fluoroallyl acrylate copolymer)	n.p.	undiluted	Not classified	Copolymer	emulsion	n.p.	NI	NI	-	NI	IV	NI	NI	Prinsen (2005)	
TNO-73 (fluoroallyl acrylate copolymer)	n.p.	undiluted	Not classified	Copolymer	emulsion	n.p.	1	2A	-	I	II	R41	R36	Prinsen (2005)	
TNO-74 (Raw material powder)	n.p.	undiluted	Not classified	Raw material	solid	n.p.	NI	NI	-	IV	III	NI	NI	Prinsen (2005)	
TNO-75 (Fluoroallyl acrylate copolymer)	n.p.	undiluted	Not classified	Copolymer	liquid	n.p.	NI	NI	-	NI	IV	NI	NI	Prinsen (2005)	

Substance	CASRN ¹	Concentration Tested	Chemical Class	Product Class	pH	Form Tested	Water Solubility ²	In Vitro Classification (GHS) ^{3,4}	In Vivo Classification (GHS) ⁴	Category I Subclass ⁵	In Vitro Classification (EPA) ^{6,7}	In Vivo Classification (EPA) ⁷	In Vitro Classification (EU) ^{8,9}	In Vivo Classification (EU) ⁹	Reference
TNO-76 (Ferro powder)	n.p.	undiluted	Not classified	Not classified		solid	n.p.	NI	NI		NI	IV	NI	NI	Prinsen (2005)
TNO-77 (Raw material liquid)	n.p.	undiluted	Not classified	Raw material		liquid	n.p.	2B	NI		III	IV	NI	NI	Prinsen (2005)
TNO-78 (Raw material liquid)	n.p.	undiluted	Not classified	Raw material		liquid	n.p.	2B	2B		III	III	NI	NI	Prinsen (2005)
TNO-79 (Silicon resin powder)	n.p.	undiluted	Not classified	Silicone resin		solid	n.p.	2B	NI		III	IV	NI	NI	Prinsen (2005)
TNO-80 (Raw material powder)	n.p.	undiluted	Not classified	Raw material		solid	n.p.	NI	NI		NI	IV	NI	NI	Prinsen (2005)
TNO-81 (Surfactant liquid)	n.p.	undiluted	Not classified	Soaps; Surfactants		liquid	n.p.	NI	NI		NI	IV	NI	NI	Prinsen (2005)
TNO-82 (Surfactant liquid)	n.p.	undiluted	Not classified	Soaps; Surfactants		liquid	n.p.	NI	NI		NI	IV	NI	NI	Prinsen (2005)
TNO-83 (Surfactant liquid)	n.p.	undiluted	Not classified	Soaps; Surfactants		liquid	n.p.	2B	2B		III	III	NI	R36	Prinsen (2005)
TNO-84 (Surfactant liquid)	n.p.	undiluted	Not classified	Soaps; Surfactants		liquid	n.p.	2B	NI		III	IV	NI	NI	Prinsen (2005)
TNO-85 (Surfactant liquid)	n.p.	undiluted	Not classified	Soaps; Surfactants		liquid	n.p.	2B	1	1	III	1	R36	R41	Prinsen (2005)
TNO-86 (Surfactant liquid)	n.p.	undiluted	Not classified	Soaps; Surfactants		liquid	n.p.	2B	NI		III	IV	NI	NI	Prinsen (2005)
TNO-87 (Enzyme liquid)	n.p.	undiluted	Not classified	Enzyme solution		liquid	n.p.	2B	NI		III	IV	NI	NI	Prinsen (2005)
TNO-88 (Miscellaneous liquid)	n.p.	undiluted	Not classified	Not classified		liquid	n.p.	NI	NI		NI	IV	NI	NI	Prinsen (2005)
TNO-89 (Ferro powder)	n.p.	undiluted	Not classified	Not classified		solid	n.p.	NI	NI		NI	IV	NI	NI	Prinsen (2005)
TNO-90 (Enzyme solution)	n.p.	undiluted	Not classified	Enzyme solution		liquid	n.p.	NI	NI		NI	IV	NI	NI	Prinsen (2005)
TNO-91 (Enzyme solution)	n.p.	undiluted	Not classified	Enzyme solution		liquid	n.p.	NI	NI		NI	IV	NI	NI	Prinsen (2005)
TNO-92 (Raw material powder)	n.p.	undiluted	Not classified	Raw material		solid	n.p.	2B	1	NC	III	I	R36	R41	Prinsen (2005)
TNO-93 (Antifouling paint)	n.p.	undiluted	Not classified	Paint		emulsion	n.p.	2A	1	NC	II	I	R36	R41	Prinsen (2005)
TNO-94 (Antifouling paint)	n.p.	undiluted	Not classified	Paint		liquid	n.p.	NI	1	NC	NI	I	NI	R41	Prinsen (2005)
Acetaldehyde	75-07-0	100%	Aldehyde	Manufacture of acetic acid, perfumes, and flavors; Narcotic		liquid	S	2A	-		II	-	R36	R36	Prinsen and Koeter (1993)
Acetic acid	64-19-7	10%	Carboxylic acid	Reagent; Indicator	2.40	liquid	S	1	1	4	I	I	R41	R41	Prinsen and Koeter (1993)
Benzalkonium chloride (100%)	8001-54-5	100%	Onium compound	Surfactant (cationic); Bactericide; Fungicide; Preservative		liquid	S	1	1	4	I	I	R41	R41	Prinsen and Koeter (1993)
Brij 35	9002-92-0	100%	Alcohol	Solvent; Excipient; Surfactant		n.p.	S	NI	-		IV	-	NI	NI	Prinsen and Koeter (1993)
Butanol	71-36-3	100%	Alcohol	Ingredient of spray paint, nail polish		liquid	S	1	2A		I	II	R41	R41	Prinsen and Koeter (1993)
2-Butoxyethyl acetate	112-07-2	100%	Alcohol	Cleaner; Polish; Sealant		liquid	n.p.	2B	-		III	-	NI	NI	Prinsen and Koeter (1993)
Chloroform	67-66-3	100%	Hydrocarbon (halogenated)	Solvent; Cleaner		liquid	I*	2A	-		II	-	R36	R36	Prinsen and Koeter (1993)
Dibutyltin dichloride	683-18-1	100%	Organometallic compound	Industrial chemical; Immunomodulatory agent		solid	S	1	-		I	-	R41	R41	Prinsen and Koeter (1993)
Dimethyl sulfoxide	67-68-5	100%	Organic sulfur compound	Solvent; Cryoprotective agent		liquid	S	NI	2B		IV	III	NI	NI	Prinsen and Koeter (1993)
n-Hexane	110-54-3	100%	Hydrocarbon (acyclic)	Solvent; Adhesive; Gasoline additive		liquid	I	NI	NI		IV	IV	NI	NI	Prinsen and Koeter (1993)
Mercury (II) chloride	7487-94-7	100%	Inorganic chloride compound	Antiseptic; Disinfectant		solid	I	1	-		I	-	R41	R41	Prinsen and Koeter (1993)
2-Methoxyethanol	109-86-4	100%	Alcohol	Solvent		liquid	S	2A	-		II	-	R36	R36	Prinsen and Koeter (1993)
Silver (I) nitrate	7761-88-8	3%	Inorganic silver/nitrogen compound	Anit-infective; Diagnostic agent		solid	S	2B	-		III	-	NI	NI	Prinsen and Koeter (1993)
Sodium dodecyl sulfate	151-21-3	100%	Carboxylic acid (salt)	Surfactant (anionic); Detergent		solid	SF	2B	-		III	-	R41	R41	Prinsen and Koeter (1993)
Sodium fluorescein	518-47-8	20%	Polycyclic	Stain; Dye		liquid	S	NI	-		IV	-	NI	NI	Prinsen and Koeter (1993)
Sodium hydroxide (1%)	1310-73-2	1%	Alkali	Caustic agent		liquid	S	1	2B		I	III	R41	R36	Prinsen and Koeter (1993)
Triacetin	102-76-1	100%	Lipid	Anti-fungal		liquid	I*	NI	NI		IV	IV	NI	NI	Prinsen and Koeter (1993)
Tributyltin chloride	1461-22-9	100%	Organometallic compound, Heavy metal	Pesticide; Preservative		liquid	n.p.	1	-		I	-	R41	R41	Prinsen and Koeter (1993)
Triethanolamine	102-71-6	100%	Amine/Amidine, Alcohol	Cleaner; Cosmetic ingredient; Intermediate for herbicides, waxes, cutting oils		liquid	S	2B	NI		III	III	NI	NI	Prinsen and Koeter (1993)

¹CASRN=Chemical Abstracts Service Registry Number.²I=Insoluble, S=Soluble, SF=Surfactant, *=solubility uncertain.³GHS=Globally Harmonized System (UN [2003]).⁴Eye Irritant Category 1 = irreversible effects on the eye/serious damage to the eye; Category 2A = reversible effects on the eye/irritating to the eyes; Category 2B = reversible effects on the eye/mildly irritating to the eyes: Nonirritant = not an eye irritant

Substance	CASRN ¹	Concentration Tested	Chemical Class	Product Class	pH	Form Tested	Water Solubility ²	<i>In Vitro</i> Classification (GHS) ^{3,4}	<i>In Vivo</i> Classification (GHS) ⁴	Category I Subclass ⁵	<i>In Vitro</i> Classification (EPA) ^{6,7}	<i>In Vivo</i> Classification (EPA) ⁷	<i>In Vitro</i> Classification (EU) ^{8,9}	<i>In Vivo</i> Classification (EU) ⁹	Reference
-----------	--------------------	----------------------	----------------	---------------	----	-------------	-------------------------------	-----------------------------------------------------	--------------------------------------------------	----------------------------------	-----------------------------------------------------	--------------------------------------------------	----------------------------------------------------	-------------------------------------------------	-----------

⁵NICEATM-defined subgroups assigned based on the lesions that drove classification of a GHS Category 1 substance. 1: based on lesions that are persistent; 2: based on lesions that are severe (not including corneal opacity score equal to 4); 3: based on lesions that are severe (not including corneal opacity score equal to 4) and persistent; 4: corneal opacity score equal to 4 at any time; NC: No subclassification could be made based on the data.

⁶EPA=U.S. Environmental Protection Agency (EPA [1996]).

⁷Toxicity Category I for the Primary Eye Irritation Study = Corrosive, or corneal involvement or irritation not reversible within 21 days; Category II = Corneal involvement or irritation clearing in 8-21 days; Category III = Corneal involvement or irritation clearing in 7 days or less; Category IV = Minimal effects clearing within 24 hr.

⁸EU=European Union (EU [2001]).

⁹Risk phrase R41 = risk of serious damage to the eyes; R36 = irritating to the eyes; nonirritant = not an eye irritant.

¹⁰SCNM=Study Criteria Not Met

¹¹n.p.=not provided

¹²numbering assigned based on order of appearance in Table 3 of Prinsen (1996)

[This Page Intentionally Left Blank]